11 SEPTEMBER 1979

(FOUO 8/79)

1 OF 1

JPRS L/8651 11 September 1979

Worldwide Report

ENVIRONMENTAL QUALITY
(FOUO 8/79)



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WORLDWIDE REPORT ENVIRONMENTAL QUALITY (FOUO 8/79)

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JAPAN

BRIEFS

LABORATORY POLLUTION .-- The Tokyo Metropolitan Government has ordered Aoyama Gakuin University to improve its drainage facilities, finding that the university was discharging waste water containing mercury and lead beyond permissible levels, it was disclosed Friday. Chemical laboratories at the Science and Engineering Department of the university were found discharging mercury 2.6 times the allowable level of 0.005 parts per million (ppm) and lead 1.4 times its permissible standard of 1 ppm at drainpipes on the campus. The metropolitan government's Bureau of Environmental Protection called university executives to its office Thursday and instructed them to correct the situation by January next year. It was the first time that such an instruction had been issued to an educational institution, on the basis of the law concerning the prevention of water pollution. There are eight chemical laboratories at the university's Science and Engineering Department and they are discharging 265 tons of waste water on the average a day into nearby Meguro River, according to metropolitan environment officials. [Text] [Tokyo THE JAPAN TIMES in English 21 Jul 79 p 2]

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GERMAN DEMOCRATIC REPUBLIC

NEW LAW ON TRANSPORTING RADIOACTIVE MATERIALS DISCUSSED

East Berlin ISOTOPENPRAXIS in German Vol 15 No 2-3, Feb-Mar 79 pp 70-73, manuscript received 20 Sep 78

[Article by W. Birkigt, E. Mueller, and F. Nitsche, GDR State Office for Atomic Safety and Radiation Protection. W. Birkigt is also a member of the Commission for Transport of Dangerous Goods, GDR Ministry for Transportation: "On the Introduction of the New 'Order on the Transportation of Radioactive Materials--ATRS'"]

[Text] -- INIS DESCRIPTORS:

German Democratic Republic; IAEA; international regulations; packaging; packaging rules; radioactive materials; transport regulations

0. Introduction

The "Order on the Transportation of Radioactive Materials--ATRS" $^{1-4}$ has long served as legal basis for the solution of the packaging and transport problems in nuclear technology in the GDR. A revision and a restatement is now needed, because both the international regulations, which were published by the Atomic Energy Authority (IAEA) in Vienna, 5 and other national and international regulations for the carriers on the transport of dangerous goods exist in a different form, or have recently been revised.

For example, the regulations ${\rm RID}^{\star}$ and ADR were issued in 1977, and SMGS Appendix 4 Table 10 on 1-4-1978. The national regulations TOG, SFO and OLTG, which must always be observed and applied in association with the ATRS, will presumably be published in a revised form in 1979.

A report is given below on the new edition of the ATRS, ⁶ which came into force on 1 August 1978, and its relationships to international and international regulations, as well as its significance for the transport of radioactive materials in the GDR.

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^{*} The expansions of the abbreviations will be given in the Appendix.

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1. The IAEA Regulations of 1973

The safety principles for the Regulations for the Safe Transport of Radio-active materials of the IAEA were not modified in the revised 1973 edition.

By means of suitable regulations, the transport of radioactive materials will be organized in such a way that it would differ as little as possible from the transport of other dangerous goods. The hazards induced by radioactive and fissile materials are:

- --external irradiation
- --internal irradiation through inhalation, ingestion or wound contamination in case of emergence of radioactive materials from the packages --criticality
- --heat evolution in case of highly active materials.

The regulations should protect the population, the transport personnel and the environment from the hazards of radiation and criticality. This protection is to be achieved by the combination of:

- --limitation of the package contents as a function of the type and activity of the content
- --package construction, and
- --simple instructions for the handling, storage and loading or stowage during transport,

while in the regulations, concrete indications are furnished on the shielding and permissible equivalent dose rates, the safe seal of the radioactive material, the evolution of heat and safety under the aspect of criticality. The regulations contain provisions for the construction and tests on packaging and packages, and instructions on the necessary licenses.

The following modifications or supplements were introduced in the $1973\ \text{IAEA}$ Regulations:

- 1. Differentiation in the group reclassification of radionuclides in individual values A_1 and A_2 for each radionuclide; A_1 and A_2 are the maximum permissible activities for a package of the type A, while A_1 is for materials in a special shape and A_2 for any materials. Other limit values are expressed as fractions or multiples of A_1 or A_2 .
- 2. Subdivision of the materials of low specific activity into I and II (low specific activity material-LSA I and LSA II).
- 3. Introduction of low-level solid radioactive material (LLS).

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- 4. Introduction of packages of the type B(U) and B(M), which indicates the markings for a large source; U means unilateral, that is, a package of the type B(U) requires in international transport only unilateral approval on the part of competent authorities of the country of origin, M means multilateral, that is, a package of the type B(M) requires approval from the authorities of all the countries involved in the transport.
- 5. Establishment of the transport index as equivalent dose rate at 1 m distance from the outside of the package, instead of 1 m from the center.
- 6. Increase of the maximum permissible transport index of the category II-GELB from $0.5\ \text{to}\ 1.$
- 7. Increase of the maximum permissible equivalent dose rate on the outside of the packages from 200 mrem/h to 1000 mrem/h for transports as sealed loads with additional conditions.
- 8. Introduction of the large container (freight container) concept, and the instructions related therewith for the transport index.
- 9. List of special examples for package specimen for fissile materials (for NSK II and III) (NSK = nuclear safety class).
- 10. Establishment of a code for license characteristics.
- 11. Further modifications of details, such as for example, the introduction of alpha emitters of low toxicity and higher limits for natural and depleted uranium, as well as natural thorium in respect of the permissible surface contamination.
- 2. Revised Draft of ATRS

The revised draft of the ATRS is characterized by the following facts:

- -- The modifications of the IAEA prescriptions were introduced;
- -- The ATRS No 1 and No 2 were combined;
- --In accordance with the GDR Standard "Units of Physical Quantities," the SI units were introduced, while approximation was carried out according to the precision of the previous units, and the old units were indicated in parentheses after the new SI units.

The main structure and the basic classification of the former ATRS No $1\,$ was maintained. The new edition contains the sections

- --I. Range of Validity and Review of the Transport Measures
- --II. Classification of the Radioactive Materials for the Transport
- --III. Requirements for Packaging and Packages
- -- IV. Requirements for the Transport
- --V. Regulations for License, Obligations for Warning and Information

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--VI. Extraordinary Results in the Transport of Radioactive Materials --VII. Traffic Extending Over the Borders into Other Countries --VIII. Penalties and Final Provisions

and the required definitions, limits, trial provisions, etc, are summarized in the appendices.

The classification of the radioactive materials given in Section II is consistent in the numbering with that of the sheets in the international regulations, while the formal deviation in items 9 and 10 of paragraph 4 will be discussed further on. The packaging regulations are classified strictly according to the division of radioactive materials, each class of materials is assigned a paragraph of the packaging regulations (but for fissile materials, 4 paragraphs). Paragraph 5 "General Requirements for Packaging and Packages" is valid for all packages, while the last items 11 to 13 with provisions for sealing, classification into the individual radiation categories and the characterization of the packages are not to be applied for individual types of packages. In the subsequent sections of the ATRS, it was not possible to adhere to the strict classification of the radioactive materials, these sections contain general provisions.

In view of the comprehensive contents, the new ATRS is naturally very extensive and complex. Simplifications in the regulatory work of the ATRS would only be possible at the cost of considerable deviations from the recommendations of the IAEA and the other international transport regulations. The exclusion of separate problem areas (for example test instructions) from the appendices and their inclusion in the TGL does not represent any advantage for the user, since there would then be no separate and complete presentation of the transport regulations, and the uses would be forced to refer to several documents.

3. Review of the Provisions for the Individual Classes of Materials

The following statements will provide a brief review of the requirements for the transport of the corresponding classes of materials, though this summary presentation does not claim in any way to be complete.

3.1. Empty Packages

Packages are considered empty when the internal contamination does not exceed 100 times the permissible external contamination. Empty packages should be marked as such, radiation warning signs or old danger symbols must be removed or covered. The equivalent dose rate on the outsides of the empty packages should not exceed 0.5 mrem/h. There are no special restrictions for the transport, permits are not needed.

3.2 Manufactured Articles of Natural or Depleted Uranium or Natural Thorium

Manufactured articles of natural or depleted uranium or natural thorium must have a resistant envelope, the packages should satisfy the general

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requirements, while the packaging functions may be assumed by the manufacturers themselves. The equivalent dose rates on the outsides of the packages should not exceed 0.5 mrem/h. No special restrictions are imposed for the transport, permits are not needed.

3.3. Radioactive Materials of Low Activity

Radioactive materials of low activity are materials with activities per package up to $10^{-3} \rm A_1$ or $10^{-3} \rm A_2$ or $10^{-4} \rm A_2$ for liquids (tritium is not included in this simplified category), containing less than 15 g fissile material. The packages must satisfy the general conditions, the marking RADIOACTIVE must be visible when the package is opened. The equivalent dose rates on the outsides of the package should not exceed 0.5 mrem/h. No special restrictions are imposed on the transport, no special permits are needed.

3.4 Radioactive Materials as Functionally Needed Element of Equipment

Radioactive materials as functionally needed elements of equipment may have activities up to $10^{-2} \rm A_1$ or $10^{-2} \rm A_2$ for solids, $10^{-3} \rm A_2$ for liquid materials, and $10^{-3} \rm A_1$ or $10^{-3} \rm A_2$ for gaseous materials, while 10 to 100 times the above mentioned activities are permissible, and the content in fissile materials should not exceed 15 g. The equipment must be marked with the indication RADIOACTIVE. The packages should satisfy the general conditions. The equivalent dose rates at 10 cm distance from the unpacked instruments should not exceed 10 mrem/h and on the outside of the packages, it should not exceed 0.5 mrem/h. No special restrictions are imposed for the transport, permits are not needed.

3.5. Radioactive Materials of Low Specific Activity I (LSA)*

Materials of low specific activity I are:

- a. Ores and ore concentrates of \mathbf{U}_{nat} or \mathbf{Th}_{nat}
- Nonirradiated natural or depleted uranium, natural thorium and their compounds
- c. Tritium oxide in aqueous solution up to 10 Ci/1
- d. Radioactive materials with uniformly distributed activity up to 10⁻⁴ A₂/g, while this value may not be exceeded, for example by increase of the concentration of activity by the possible unfavorable effects of conditions in the transport (dissolution with subsequent recrystallization, precipitation, evaporation, combustion, etc)
- e. Contaminated objects with ten times the normally permissible external contamination, while no concentrations of activities higher than 10^{-4} $\rm A_2/g$ should arise with the possibly unfavorable effects of conditions in the transport. The additional conditions with regard to the possible

^{*} LSA = low specific activity 6

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occurrence of increases in the concentration of activity in the materials cited under items d and e were reviewed and were the cause of the separation of the rac'l active materials of low specific activity I and II. They represent stricter requirements, hence the transport of these materials in (commercial) packages must not be limited to the sealed loading.

Two possibilities arise for the transport of radioactive materials of low specific activity ${\tt I:}$

- --general transport --transport as sealed load
- a. General Transport

The packages must satisfy the general conditions, they must be sealed and be provided with danger signs designating radioactive materials according to the assignment to the radiation category I, II or III.

For the transport, the following should be considered:

- --indication of the means of transport
- --ban on combined loading with dangerous goods
- --no transport in sections occupied by passengers (except for accompanying personnel
- --distance from photographic materials
- --limitation of the number of transport code numbers to 50.

Permits are not needed.

b. Transport as Sealed Load

Transports in scaled loads are possible in solid commercial packaging, in large containers or loose in bulk, for tritium oxide in aqueous solution the limit is 50,000 Ci and for liquid and gaseous materials, $100 \, \text{A}_2$.

When using packages, the latter must be marked RADIOACTIVE (LSA I). Equivalent dose rates on the outside of the packages up to 200 mrem/h and in special conditions up to 1000 mrem/h are permissible. The equivalent dose rate on the outside of the means of transport should not exceed 200 mrem/h, and at a distance of 2 m from the vertical exterior, 10 mrem/h.

In the case of loose goods (air transport not permitted) no radioactive materials should reach the exterior of the means of transport. The latter must be marked.

3.6. Radioactive Materials of Low Specific Activity II (LSA II)

Materials of low specific activity II are:

a. Radioactive materials with uniformly distributed activity up to 10^{-4} A $_2/\mathrm{g}$

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b. Contaminated objects with contaminations up to 1 MCi/cm^2 for $\text{$\beta$}$ -emitters and 0.1 \$A\$ Ci/cm² for \$C\$ -emitters.

These materials should only be transported as sealed load, and for tritium oxide, the limit is 50,000 Ci and in the case of liquid and gaseous materials, the limit is 100 A₂. Packaging types should be used, satisfying the general requirements, and they must be marked RADIOACTIVE (LSA II). On the outside of the packages, equivalent dose rates up to 200 mrem/h are permissible, and in special conditions, up to 1000 mrem/h. The means of transport should be marked. No permits are needed.

3.7. Radioactive Materials of Low Activity (LLS)*

These materials were recently included in the IAEA Regulations, and are important with regard to solidified wastes or activated materials. Solid radioactive materials of low activity are:

- a. solids with a uniform distribution of activity up to $2.10^{-3} A_2/g$ and additional requirements for the solubility
- b. contaminated objects with contaminations up to 20 $\mbox{$\it H$ Ci/cm}^2$ for $\it P$-emitters and 2 <math>\mbox{$\it H$ Ci/cm}^2$ for $\it Q$-emitters.}$

Solid wastes should only be transported in sealed load. The packages should satisfy the general requirements and according to tests for type A packages should prevent the loss of the radioactive content and the increase in the increase of the equivalent dose rates (solid industrial packages). These packages should be marked RADIOACTIVE (LLS). The maximum equivalent dose rates on the outside of the package should be 200 mrem/h (transport code number up to 10), and in special conditions, 1000 mrem/h. The equivalent dose rates on the outside walls of the means of transport should not exceed 200 mrem/h, and at a distance of 2 m from the vertical external walls, 10 mrem/h. The means of transport should be marked. Permits are not needed.

3.8. Radioactive Materials of Medium Activity

Radioactive materials of medium activity are designated in international regulations, which are classified in a "sheet form," as "Radioactive materials in Type A packages." The activity limit per package is $\rm A_1$ for materials in a special shape and $\rm A_2$ for any materials. The following requirements should be satisfied:

- --Transport in Type A packages with danger signs corresponding to the radiation categories I, II or III;
- --Bans on combined loading with dangerous goods;
- --Distance from photographic materials;

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^{*} LLS = low level solid

- --Transport forbidden in sections occupied by passengers (except for accompanying personnel);
- --Limitation of the sum of transport code numbers to 50 (outside transports as sealed load);
- -- Marking of the means of transport.

Permits are not needed

3.9. Radioactive Materials of High Activity (I)

Radioactive materials of high activity (I) may show per package, activities up to $3.10^3 \rm A$ or $3.10^3 \rm A_2$ or 3.10^4 Ci. For the transport all the above mentioned conditions must be satisfied for radioactive materials of medium activity. However, packages of the type B(U) or the type B(M) are needed, which should be able to resist in a medium scale transport accident, defined by prescribed tests (9 m fall, 1.2 m fall on baffle, fire test, water submersion test) and the evolution of heat and the effect of radiation should be taken into consideration on the basis of the higher activity. These packages are identical to those of the previous types B I and B II. Packages (specimens) of the type B (U) only require unilateral permit from the competent authorities of the country of origin, which is acknowledged by the authorities abroad. Packages (specimens) of the type B(M) need special measures during the transport; the SAAS or in case of international transport, the competent authorities of the countries involved in the transport must be notified before the transport begins; type B(M) packages with constant gas evolution need a transport permit.

3.10. Radioactive Materials of High Activity (II)

In case of radioactive materials of high activity (II), the above mentioned limits of activities are exceeded. With regard to the provisions for packaging and packages and transport requirements, all the provisions valid for radioactive materials of high activity must be maintained. In addition, the SAAS is to be notified before the transport begins, and notice is to be given to the competent Office of the German State Police. In case of international transport, the competent authorities of all the countries involved in the transport should be informed.

Compared to the international regulations in "Sheet Form" (for example, RID), "Radioactive materials of high activity (I)" according to ATRS paragraph 4, number 9, is not totally identical, formally with "Radioactive materials in type B(U) packages" according to RID Sheet 9, nor "Radioactive materials of high activity (II) according to ATRS paragraph 4, number 10 with "Radioactive materials in type B(M) packages" according to RID, Sheet 10. In the ATRS, the classification is strictly according to the activity of the material, in the RID a classification is taken according to the package used for consignments. The requirements for the consignment packages and the transport provisions are totally consistent, it is only a different form of representation.

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3.11. Fissile Materials

The provisions for fissile materials are basically unchanged. Packages for consignment of Nuclear Safety Classes I, II, III are defined. For the Nuclear Safety Classes II and III, examples were reincorporated for package specimens, which would permit the transport of small amounts of fissile materials, and which would not require costly safety proofs when applying for permits for the type of consignment package. The required approval of the package does not depend on the Nuclear Safety Class. The SAAS is to be notified about the transport of fissile materials, and the competent Office of the German State Police should also be informed.

A transport permit from the SAAS is needed for transport of packages of the Nuclear Safety Classes II and III.

4. Prospects

The safety principles for the transport regulations have not been modified and the basic packaging requirements were retained. We should therefore not expect extensive modifications or additional difficulties in the transport of radioactive materials. In the transition provisions, it was established, that the existing permits retain their validity, for international requirements the supplementary measures can be implemented at relatively low cost, so that we need only take into consideration certain procedural changes and slight organizational costs.

By assigning the group classification of the radionuclides and introducing the values Λ_1 and Λ_2 for each individual radionuclide, the existing packages can be used better, since in most cases the permissible activity per package is higher.

On the part of the IAEA, there is a plan to revise the IAEA regulations every 10 years, so that the next edition may be expected in 1983. The revision of the ATRS would then be necessary, taking into account the term of introduction in the international regulations of the individual carriers with the corresponding time shift.

In the application of a comparatively complicated regulation, such as given in the ATRS, limiting cases should always be taken into consideration, for which the assignment of the radioactive materials into one class of material or the other is difficult. It is therefore provided to publish examples in the form of problems with solutions for the transport of radioactive materials, which would explain to the users of the ATRS the application of the latter and make it simpler for them.

Appendix

--International Agreement on Railroad Freight Carriage (CIM) Appendix I, International Order on the Carriage of Dangerous Goods by Railroad (RID), Class 7

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--European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)

--International Maritime Dangerous Goods Code (IMCO, Class 7, published by the Intergovernmental Maritime Consultative Organization (IMCO) London)

-- IATA Regulation Relating to the Carriage of Restricted Articles by Air, Part 2, Class 7 (IATA: International Air Transport Association)

--Agreement on the International Railroad Carriage of Goods (SMGS), Appendix 1 to Article 4 Table 10

--Order on the Transport of Dangerous Goods by Railroad, Vehicles and Ships for Internal Navigation--Transport Order for Dangerous Goods (TOG)

--Order on the Handling of Dangerous Goods in Maritime Transport and Port Transshipment -- Sea Freight Ordinance (SFO)

--Order on the Transport by Air of Dangerous Goods (OLTG).

FOOTNOTES

- 1. Law on the Transport of Radioactive Materials -- ATRS -- of 10-6-1967, GESETZBLATT DER DDR, Offprint No 552.
- 2. Law on the Transport of Radioactive Materials of 11-2-1971, GESETZBLATT DER DDR, Offprint No 697.
- 3. D. Richter, ISOTOPENPRAXIS 4 (1968) 37.
- 4. D. Richter, W. Birkigt: "Erlaeuterungen zu den Vorschriften ueber den Transport Radioaktiver Stoffe hoher Aktivitaet" [Comments on the Regulations of the Transport of Radioactive Materials of High Activity], Report SZS-19/70, September 1970.
- 5. Regulations for the Safe Transport of Radioactive Materials, International Atomic Energy Agency, Safety Series No 6, Revised Edition, Vienna, 1973.
- 6. Law on the Transport of Radioactive Materials, ATRS, of 12-4-1978, GESETZBLATT DER DDR, Offprint No 953.
- 7. G. E. Swindelt: "The Safe Transport of Radioactive Materials, IAEA-PL-568 Budapest," September 1973.

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^{*} Relevant to the railroads of the socialist countries

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INTERNATIONAL AFFAIRS

SYNOPSIS OF WEST EUROPEAN ENVIRONMENTAL PROTECTION EFFORTS

Paris FUTURIBLES in French May 79 pp 97-104

[Official Summary issued by the Institute for a European Environmental Policy]

[Text] Environment and the Rights of Man

The environment and the rights of man are two subjects which have for some time been much discussed and rediscussed in close relation. This situation is not just a question of fashion and putting them together is not just an intellectual game in which this double issue could be included. On the contrary, becoming aware of certain changes make one sensitive as well to the discrepancy between the two areas and the ways in which they complement each other.

All the industrial countries have recognized for the future the seriousness of the dangers of a polluted environment for the health and life of man. But beyond the pollution problems, and thus on a much vaster scale which concerns the whole planet, it is seen that the disorderly use of natural resources, whether vegetable, animal or mineral, renewable or not, also constitutes a threat to humanity. Beyond this problem of resource management lies the question of the whole natural equilibrium, modifications which are imposed on it by human activities, and long term consequences of the multiple chain reactions that these modifications bring about.

The awareness is thus twofold: it is of the absolute necessity of protecting man, of assuring his health, his life, and ultimately his survival against the dangers which his degraded environment has for him.

The awareness is also that of the necessity of protecting the environment against the action of man and against man himself. The two requirements are not necessarily mutually exclusive, but are the source of the problems.

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Environmental policies are the expression of this awareness, but they contain the germs of conflicts which can limit their scope. To protect from the clutches of man it is necessary to limit his activities, to impose constraints on him which are always more numerous and more explicit in the most diverse fields.

This constitutes restrictions on the traditional fundamental liberties of man, which taken with the workings of daily encroachments is scarcely noticed.

Competition between environmental policy and the rights of man is demonstrated in a noticeable way when it's time to choose directions and goals.

Environmental protection may be aimed in various directions, going from the most absolute radicalism (priority to the environment and strong constraints on man) to compromises or else a quasi absence of protection. In actuality, environmental protection and social and economic requirements are rarely compatible. The conflict is generally resolved by compromises or even by preference given to the second to the detriment of the first, and done in the name of the social and economic rights of man.

To avoid this opposition and to give environmental requirements a strength equal to that of the rights to which they are sometimes sacrificed, it would be necessary, looking at the long term where the future of the human race is at stake, to formulate the right of man to the environment.

Some countries have recognized such a right in their constitutions. After Portugal in 1976, Spain has just followed this route. The proposed French constitutional law of December 1977, which has not been reregistered since the 1978 elections, provides in article 10 that "every man has a right to a healthy and balanced environment and he has the right to protect it." Other constitutions (Greece, China) or reform programs (Switzerland, Netherlands) consider the environment to be one of the areas where it is incumbent upon the state to act. Other states do not mention the environment, but consider it implicitly named under the heading of governmental responsibilities. Most socialist countries also have identical constitutional formulas, or else interpretations, and affirm both a right of citizens to a healthy environment and their duty, as well as that of the state, to defend it.

Undoubtedly, the recognition of these rights has only a stated value. No one could make good a subjective right to the environment before a court. The difficulty of defining the contents of such a right as well as expanding the means of enforcement are obstacles, but an obvious willingness to give the environment's requirements an equal rank with other objectives must be established.

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The same tendencies which are demonstrated at the national level are also found at the international level. The United Nations conference on the environment at Stockholm in June 1972 proclaimed the existence of the fundamental right of man "to liberty, equality, and satisfactory living conditions in an environment which permits him to live with dignity and well being." This very spiritual declaration in terms of its legal concreteness has nevertheless inspired the constitutional works which have just been mentioned.

The European Council on several occasions gave attention to the proposal of a right of man to the environment during the European convention for the rights of man and similar thoughts were pursued at the national level.

On the initiative of the Institute for a European Environmental Policy and the International Rights of Man Institute a conference on this theme, which brought together politicians and experts from 19 European countries at Strasbourg in January 1979, established that the right to the environment exists. Certainly, the definition of the contents of this right and, even more, the possibilities of legal enforcement appear rather problematic: but numerous intervening parties have emphasized the importance of citizens' participation in decisions concerning the environment; this participation being felt as a counterweight to the necessary constraints imposed by the environmental protection requirements. Moreover, the accent has been put on the necessity of political willingness, which alone will give priority to environmental protection in case of conflicts of objectives. So the formulation of a right to the environment on a national or international level appeared to be a manifestation of this willingness, and could be the subject of a specific declaration. The result, without going so far as to imitate U.S. jurisprudence where the trees can sue in court, would at least be a step towards the possibility of overcoming all contradictions between environmental protection and the rights of man.

Transborder Pollution

The Conference of Local and Regional European Powers (European Council) has just organized an important conference at Aix-la-Chapelle during 3-5 April 1979 on the prevention of transborder pollutions and the cooperation of local and regional collectives. This has allowed the drawing up of a balance sheet of efforts undertaken during the last few years to find effective means of solving the problems of transborder pollution. The reports that were presented offered a rather marked contrast to the optimism of the opening speech.

In the Netherlands, for example, the air quality controls showed that, under some atmospheric conditions, the percentage of anhydrous sulfur in the air coming from the borders, partially from Belgium, but even more from Germany, is much higher than the limit authorized by Dutch law.

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A Belgian official brought up the German authorities' lack of information when a toxic cloud accidentally emitted by a German factory crossed above Belgian territory.

As far back as 1975 in the Bale region, a tripartite cooperation among Switzerland, Germany, and France was voluntarily expanded in scope in the development of the territory and protection of the environment. Since the creation of official structure at the national level, this cooperation seems to be attacked by paralysis for the future. In this case it is France which blocks this cooperation. After some examples of more encouraging cooperation, it would seem that the solutions to the problems of transborder pollution could only be found when a common interest exists or there were ways to negotiate other than by official channels. To the present all attempts to render procedures into formal form for the resolution of conflicts of interest seem to have failed. At present in fact, the tendency of the countries is to give attention to the dangers to which they would be exposed rather than to remedying those to which they are exposing their neighbors.

Numerous proposals are constantly being advanced on the basis of presented reports. In them the necessity of including on the intergovernmental commissions the best informed local and regional officials has been particularly emphasized.

These participants also have strongly recommended in their final statement that the following measures be taken: reciprocal consultation on all activity involving a risk of transborder pollution; equal access to information and recourse by citizens on both sides of a border; application of the nondiscrimination principle, which means the duty to take the neighboring countries into account in impact studies and public inquests; application of the polluter-payer principle to transborder pollution. Lastly, the Congress proposed some urgent measures: the organization of the Rhineland regions into one unit, as well as the Mediterranean basin areas, to discuss inpriority the serious pollution problems which affect these zones.

The Institute for a European Environmental Policy has just finished a study in the area of transborder pollutions. It concerns France and its frontiers with the six countries that border it, and contains interesting conclusions. This study may be obtained on request from the Institute.

News Briefs

Nuclear: Security in Europe

A decision was taken 27 March 1979 by the Council of the European Communities [EC] ordering a research project on the dismantlement of nuclear powerplants (direct action). The principal directive of this project, estimated to last 5 years and allocated 4.7 million credit units, is to

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facilitate the final nuclear plant dismantlement. The preliminary research concerns dismantlement techniques and the treatment and estimation of wastes according to the characteristics of the various powerplants and the integrity of their buildings.

Complementing this project, the EC Council decided the same day to start a research project on the security of thermal reactors from water.² This indirect action project (done by contracting) has the safe use of nuclear reactors as its goal. The research will concern accidents risked because of loss of cooling fluids, the functioning and the performance of the emergency cooling system at the core, gas cloud explosions, and the ejection and distribution of radioactive fission products into the atmosphere after an accident. The unexpected accident at the Three-Mile Island plant on 28 March 1979 gave a particular emphasis to this decision, just like the statements of some governmental authorities.

In Sweden, for example, the party which launched its nuclear program announced itself in favor of a referendum³ which would take place in the spring of 1980; the West German Government decided to take an exhaustive inventory³ of the security means and methods at the country's nuclear plants. On 20 May the Swiss will decide anew on a law³ to strengthen political control over nuclear energy.

Storage of Wastes

On 5 March 1979 the EC Commission presented a proposal to the EC Council to establish a project on the management and disposal of radioactive nuclear wastes (1980-1984). The completed project was valued at 53 million credit units.

The projected work will try to solve some technological problems (treatment and storage of wastes) as well as the legal and administrative aspects of this issue. At the same time, the European Parliament adopted a resolution approving the proposed decision. The Parliament feels that a communal system for radioactive waste storage would be an important stage in the internationalization of waste management.

Storage and Retreatment in RFA6

The Basse-Saxe authorities organized parliamentary hearings at Hanover during 28 March - 3 April 1978 on the problem of a treatment center for and storage of the Gorleben nuclear wastes.

Among the participants were about 20 foreign scientists, German experts, and representatives of RFA, one of the largest producers of electricity.

Following these hearings, the German authorities think they will be in a position to make a definitive decision on the problem by May or June.

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Simultaneously, 2,000 inhabitants of the Gorleben region organized a protest march which was concluded with a nonviolent demonstration by 40,000 people against nuclear powerplants.

On this occasion, Mr Willy Brandt stated that after the Harrisburg accident it was advisable to "rethink" the entire atomic energy problem.

Choice of Nuclear Powerplant Sites in Italy

The existing state of affairs is being maintained in Italy because the parliament has not passed into law within the time prescribed by the constitutional decree-law of 13 November 1978 (number 703) a bill providing for the building of a nuclear powerplant (two 1000 megawatt elements) in the Molise region. This site had been chosen in December 1973 by CIPE (Interministerial Commission for Economic Planning).

Again and again the region has pronounced itself against the choice and the Interegional Consultative Commission (composed of all the regional presidents) twice unanimously approved the request from Molise to be excluded from the plan for nuclear powerplant building sites. This particularly disfavored region has already sacrificed by accepting changes in the courses of two of its rivers. The colling waters for the plant would have been diverted into the sea, which would have ruined the ecological equilibrium for several kilometers along the coast near the discharge. This governmental decree came from the application of the 2 August 1975 law which, even though it provided for agreement among the regional authorities, did not provide for the Molise (article 22) except for a consultation for opinion with the Interegional Consultative Commission.

After numerous demonstrations and a long procedural battle, this decree is hendeforward null and void; the government has stated that it is going to reexamine the problem in all its complexity. It would propose new measures which would not appear discriminatory against any region.

Solar Energy

The European Parliament has adopted a resolution favorable to the EC Commission proposal relative to the application of EEC rule number 1303/78 which concerns the action on financial support of development projects for alternative energy sources, in the solar energy sector.

In this resolution the European Parliament approves the commision's proposal, but at the same time it expresses the deepest reserve about decision making procedures which would weaken the budgetary powers of the European Parliament.

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Toxic Substances

On 17 November 1978 the Danish Government proposed a law 10 to control chemical products. This long expected proposal adds a piece to the puzzle of European regulation in this area.

This project reflects EC proposals; however, it is much larger in its applications because it extends to the regulation of classification, packaging, storage, sale, and use limitations of chemical products. It also imposes on the manufacturers and importers the obligation to indicate the possible dangers to health on the chemical products which they manufacture or import.

At present there is no law in Italy concerning the control of chemical products. Nevertheless, the new 23 December 1978 law number 83311, instituting a "national health service" to replace the 1934 health law, provides some appropriate measures to avoid the possible dangers presented by some dangerous substances.

Article four in effect provides that the government will fix by decree the tolerable limits of chemical, physical, biological, and noise pollution in the national territory.

Article nine provides for the establishment of a higher health institute, under the authority of the Health Ministry, which would be responsible for regular publication of the national inventory of chemical products, as well as detailed analysis of their characteristics, in such a way that the risks which they represent to public health by being present in the atmosphere can be avaluated.

Article 20 enumerates the list of activities incumbent upon the "local health units." Particular mention is made of the identification and control of dangerous substances, inspection of production equipment, a summary of measurements and the establishment of "risk cads" on the basis of information given by the manufacturers.

Nevertheless, the strength of this article is greatly limited in the following paragraph: this information will be furnished while still preserving industrial secrets.

On 10 January 1979 the American Environmental Protection Agency (EPA) published a directive defining the notification procedures before commercialization required by section five of the "Toxic Substances Control Act" (Tosca, a law controlling toxic substances). EPA then asked for opinions of this plan.

On 19 March 1979 the EC Commission forwarded a verbal note to the American authorities to inform them of its comments. The result of this note is that the differences which have long existed between the United States and EC about the best means of controlling toxic substances were made

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public. In effect the commission feels that obstacles to trade will be erected unnecessarily, if this plan is adopted without revision. The commission also criticized the lack of clarity, the absence of a distinction between the large scale manufacturers and the first to declare a product, which has at first only a rather small production, and it feels there is a problem of industrial ownership of secrets and that the importers would have to shoulder much heavier burdens than the U.S. manufacturers.

U.S. administrative procedure requires that EPA now draft a final text which must contain a public response to all the expressed criticisms, including those of the Commission.

Marine Pollution

On 14 February 1979 the European Parliament adopted a resolution 12 on "the most efficacious means of avoiding maritime accidents and the pollution which results from them." This resolution is based on a report made in the name of the commission on regional policy for territorial management and transportation, which severely criticizes the attitude of the member states' governments. The resolution emphasizes the vital importance of ratifying existing conventions and enlists the Commission to take the steps necessary for: creation of "ports of refuge" where ships in difficulty could unload safely; installations which would be the maritime equivalent of the "black box" on board ships over a certain tonnage.

This resolution insists upon the necessity of better coordination of all the measures taken, but nevertheless rejects the creation of special communal rescue teams.

On 22 January 1979 in its response 13 to question number 794/78 on the protection of the seas against pollution, the EC commission indicates that it has taken note of the recommendation by the European Council's Parliamentary Assembly on 2 October 1978, principally aimed at the creation of an international agency for the coordination of activities, and of the findings of the protection efforts in the European coastal zones by the Parliamentary Commission of Inquiry of the French National Assembly. The EC Commission then enumerated all the measures taken by EC in this area.

Territorial Distribution. Urbanism

On 6 February 1979 the Dutch Ministry of Territorial Management submitted to Parliament its master plan¹⁴ (plansolgisch kernbeslissing), which it means to use in urban development planning. This is the finale of a long consultation procedures begun in 1975 with the presentation of the third note on urban territorial distribution. The objective followed throughout these directions, which on the one hand define the growth zones and on the other define those which must not be submitted to new urban pressures, is to assure an equilibrium between environmental and urbanization requirements. For example, between Amsterdam and Rotterdam, a zone with particularly dense urbanization, there is very little allowance for growth zones.

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In September 1977 a study of the habitat in the zones surrounding the urban areas was entrusted to Mr Jacques Mayoux under the auspices of the interministerial program of rationalization of budgetary choices. On 21 March 1979¹⁵ the conclusions of these works on space management were submitted to Mr d'Ornano, minister of environment and life planning. It is to be noted that the objectives that this study project endeavored to identify emphasized the emergence of local powers in the area of space management.

Flora Protection

A ministerial decision giving provisionary approval to the proposed national nature park Hautes-Fagnes-Eifel was published in the Belgian JOURNAL OFFICIEL. Signed 31 March 1978, this decision has been in effect since 28 February 1979¹⁶.

On 6 February 1979 17 the EC Council adopted a ruling which founds a communal forestry action in some Mediterranean zones of EC.

Projected to last 5 years, its estimated cost is set at 184 million credit units. This planned program concerns timbering methods for the depleted forests and the necessary complementary measures for this forestry action.

A Group Report

The European Council published a report¹⁸ on environmental policy which draws up an inventory of the national policies of the member states, of the action taken by the European Council, and of the activities of EC and of some international organizations in this area during 1978-1979.

FOOTNOTES

- 1. JOURNAL OFFICIEL DES COMMUNAUTES EUROPEENNES, 3 April 1979, No L 83.
- 2. JOURNAL OFFICIEL DES COMMUNAUTES EUROPEENNES, 3 April 1979, No L 83.
- 3. LE MONDE, 6 April 1979.
- 4. JOURNAL OFFICIEL DES COMMUNAUTES EUROPEENNES, 27 March 1979, No C 80.
- 5. JOURNAL OFFICIEL DES COMMUNAUTES EUROPEENNES, 10 April 1979, No C 85.
- 6. SPIEGEL, 26 March 1979, No 3.--FRANKFURTER RUNDSCHAU, 24 March to April 1979.--LE MONDE, 3 April 1979.
- 7. GAZETTA UFFICIALE, 17 November 1978, No 322.
- 8. GAZETTA UFFICIALE, 23 August 1975. No 224.

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- 9. JOURNAL OFFICIEL DES COMMUNAUTES EUROPEENNES, 12 February 1979, No C 39.
- Lovforslag nr. L 79 Blas nr. 191. Fremsat den 17 November 1978 af mlljoministeren.
- 11. Legge, 23 December 1978, No 833, GAZETTA UFFICIALE, No 360.
- 12. JOURNAL OFFICIEL DES COMMUNAUTES EUROPEENNES, 12 March 1979, No C 67, report, document 555/78.
- 13. JOURNAL OFFICIEL DES COMMUNAUTES EUROPEENNES, 19 February 1979, No C 45.
- 14. TWEEDE KAMER, 13754, Nos 98-99.
- 15. PRESSE ENVIRONNEMENT, 23 March 1979, No 324.
- 16. MONITEUR BELGE, 2226, 27 February 1979.
- 17. JOURNAL OFFICIEL DES COMMUNAUTES EUROPEENNES, 14 February 1979, No L 38.
- 18. Conseil de l'Europe, docement 4267, 16 January 1979.

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Worldwide Report

ENVIRONMENTAL QUALITY
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